ATTACHMENT C
Amendments to the Claims

Following herewith is a complete listing of the claims, including a marked copy of the currently amended claims.

1. (Currently Amended) A method for digitizing data, comprising:
setting an element of an electronic ink display to one of a plurality of display states;
modifying the display state of the element by writing to the display with an external device; and
electronically reading the element to determine if the display state has been modified.

2. (Original) The method of claim 1, wherein the external device comprises a hand held charged device.

3. (Original) The method of claim 1, wherein reading the element to determine if the display state has been modified comprises detecting an electrical property related to the display state of the element.

4. (Currently Amended) The method of claim 1, wherein reading the element to determine if the display state has been modified comprises measuring ~~the~~ an electrical current required to reset the element to a predetermined display state.

5. (Original) The method of claim 3, wherein the electrical property comprises an impedance.

6. (Original) The method of claim 3, wherein the electrical property comprises a capacitance.

7. (Original) The method of claim 3 wherein the electrical property comprises an electrical current.

8. (Original) The method of claim 3, wherein the electrical property is detected, at least in part, by application of a probe signal.

9. (Currently Amended) The method of claim 1, wherein reading the element to determine if the display state has been modified comprises measuring ~~the~~ a current required to reset the element to a display state stored for the element in memory.

10. (Currently Amended) The method of claim 1, wherein reading the element to determine if the display state has been modified comprises measuring ~~the~~ a current required to set the element to a display state that represents ~~the~~ an inverse of a display state stored for the element in a memory followed by resetting the element to a display state stored for the element in the memory.

11. (Original) The method of claim 1 wherein the display state of the element is sustained in a power down or power off mode of the electronic ink display after the element has been set.

12. (Original) The method of claim 1 wherein reading the element to determine if the display state has been modified comprises referring to one or more models.

13. (Original) The method of claim 1, wherein reading the element to determine if the display state has been modified is performed using a grid that is also used in setting the element.

14. (Currently Amended) A method of digitizing data, comprising:

setting an element of a display comprised of bistable display elements to one of a plurality of predetermined display states wherein the display state of the element persists in a power down or power off mode of the display after the element has been set;

modifying the display state of the display element with an external device; and electronically reading the display element to detect the display state.

15. (Original) The method of claim 14 further comprising updating a display memory with the display state.

16. (Original) The method of claim 14 further comprising determining whether the display state has been modified by the external device.

17. (Original) The method of claim 14 wherein reading the element of the display to obtain a display state comprises resetting the element to a predetermined reset state and measuring the current required to perform the reset operation.

18. (Original) The method of claim 14, wherein reading the element of the display to obtain a display state is performed on a grid that is also used in setting the element.

19. (Original) The method of claim 14, wherein reading the element of the display to obtain a display state comprises probing to detect an electrical property of the element.

20. (Original) The method of claim 19, wherein the electrical property comprises an impedance.

21. (Original) The method of claim 19, wherein the electrical property comprises a capacitance.

22. (Original) The method of claim 19, wherein the electrical property is determined, at least in part, by application of a small signal alternating current to the display element.

23. (Original) The method of claim 19 wherein the display state is determined, at least in part, by reference to a model.

24. (Original) The method of claim 23 wherein the model accounts for variables comprising environmental variables.

25. (Original) The method of claim 23 wherein the model accounts for variables comprising process variables.

26. (Currently Amended) A system for digitizing data written to an electronic ink display, comprising:

means for setting an element of the electronic ink display array to one of a plurality of predetermined display states from display data stored in memory;

means for modifying the display state of the element by writing to the electronic ink display with an external device;

means for electronically reading the element of the electronic display array to determine the display state; and

means for writing the display state read for the element to memory.

27. (Original) A system for digitizing data written to an electronic ink display, comprising:

an electronic ink display that includes an array of display elements in which a plurality of charged pigmented particles are suspended in a dielectric medium, the array of display elements interposed between a common electrode and a grid of addressable electrode elements;

a hand-held charged device to effect display state modifications in one or more display elements of the electronic ink display;

a memory to store display data representing display states for the display elements of the electronic ink display;

a display driver operatively connected between the memory and the grid of addressable electrode elements to set display states of at least one display element of the electronic ink display based on the display data; and

an identification and detection circuit operatively connected to the electronic ink display to determine the display state of the at least one display element of the electronic ink display.

28. (Original) The system of claim 27, wherein the identification and detection circuit is operatively connected to the grid of individually addressable electrode elements to which the display driver circuit is also operatively connected.

29. (Original) The system of claim 27 wherein the identification and detection circuit comprises a circuit to measure an electrical current required to perform one or more set operations by the display driver.

30. (Currently Amended) A ~~program comprising a storage medium tangibly embodying program instructions~~ computer readable medium having computer executable instructions for performing a method for digitizing data written to an electronic ink display, the ~~program instructions~~ computer readable medium including instructions operable to cause at least one programmable processor to:

set an element of the electronic ink display array to one of a plurality of persistent display states based on display data in memory;

wait in a power down or power off mode of operation for a signal to initiate a read operation;

read the element to determine the display state; and

store data for the display state read in the memory.

31. (Currently Amended) The ~~program~~ computer readable medium of claim 30 wherein the computer executable instructions to cause the at least one programmable processor to read ~~operation~~ the element ~~comprises~~ comprise instructions to detect ~~detecting~~ an electrical property related to the display element.

32. (Currently Amended) The ~~program~~ computer readable medium of claim 30 wherein the computer executable instructions to cause the at least one programmable processor to read ~~operation~~ the element ~~comprises~~ comprise instructions to measure ~~measuring the~~ an electrical current required to reset the element to a predetermined display state.

33. (Currently Amended) The ~~program~~ computer readable medium of claim 30 wherein the computer executable instructions to cause the at least one programmable processor

to read ~~operation~~ the element ~~comprises~~ comprise instructions to measure ~~measuring the~~ a current required to reset the element to a display state stored for the element in memory.

34. (Currently Amended) The ~~program~~ computer readable medium of claim 30 wherein the computer executable instructions to cause the at least one programmable processor to read ~~operation~~ the element ~~comprises~~ comprise instructions to measure ~~measuring the~~ a current required to:

set the element to a display state that represents ~~the~~ an inverse of ~~a~~ the display state stored for the element in memory, and

~~followed by resetting~~ reset the element to the display state stored for the element in the memory.

35. (New) The system of claim 27, further comprising a digitize function key to activate the identification and detection circuit.

36. (New) A method of operating an electronic ink display having bistable display elements, comprising

writing an image to the electronic ink display by setting the states of the bistable display element using data stored in a display memory;

entering a power down mode wherein the image persists on the display;

receiving modifications to the image on the electronic ink display from a user externally applying charge to selected bistable display elements with a handheld device, said modifications being visible on the display but not yet stored in the display memory;

reading the states of the bistable display elements in response to receiving a command to initiate a store procedure; and

updating the display memory with the states of the bistable display elements such that a modified image is stored in the display memory.

37. (New) The method of claim 36, wherein said command to initiate a store procedure is initiated by the user.

38. (New) The method of claim 36, wherein said command to initiate a store procedure is initiated automatically by a timer.

39. (New) The method of claim 36, wherein said step of reading the states of the bistable display elements includes setting each bistable display element to a predetermined state and measuring the current required to perform each operation to determine the state of the element prior to being set to said predetermined state; and wherein said method further comprises restoring the modified image to the display following setting the bistable display elements to a predetermined state by setting the states of the bistable display elements using the updated data stored in the display memory.